



DATE: March 25, 2011
TO: The Chairman and Board Members
FROM: Roelof van Ark, Chief Executive Officer
RE: Agenda Item #2 – Federal High Speed & Intercity Passenger Rail Funding Request

Discussion:

On March 16, 2011, the Federal Railroad Administration (FRA) issued a Notice of Funding Availability (NOFA) to solicit applications for eligible high speed and intercity passenger rail projects that could immediately proceed to award for \$2.43 billion. This funding is comprised of funds being made available as a result of the State of Florida deciding not to proceed with its high-speed rail project plus unallocated American Recovery and Reinvestment Act (ARRA) funding. Of the \$2.43 billion, \$1.63 billion is ARRA funds and \$800 million is from the FY 2010 Consolidated Appropriations Act.

Any projects receiving funding under ARRA must be able to be obligated by September 30, 2012, and completed by September 30, 2017. Conversely, any projects receiving FY 10 funds would not have these restrictions. FRA has signaled that it anticipates making multiple awards and has advised applicants to subdivide higher-cost undertakings into discrete project components or phases. The FRA has also indicated that applications offering substantial non-Federal financing options (local match) will be looked on more favorably during the project review and selection process. Applications for these funds must be submitted to the FRA by Monday, April 4, 2011.

Background:

In 2009 and 2010, the California High-Speed Rail Authority (CHSRA) applied for and received funding from the FRA under the new High-Speed Intercity Passenger Rail Program (HSIPR) which were made available under the American Recovery and Reinvestment Act (ARRA) and the FY 2010 Consolidated Appropriations Act to be matched with California Proposition 1A bond proceeds.

To date, the CHSRA has secured:

- \$194 million to be applied to the PE/NEPA/CEQA phase of the Phase 1 program
- \$37.5 million for station area planning and for LA Union Station right-of-way preservation

- \$16 million for the design/implementation of the first Positive Train Control/ERTMS interface implementation on the Peninsula
- \$2.95 billion to initiate final design and construction of Phase 1 of the California High-Speed Train Project (CHSTP).

In November 2010, the FRA clarified that the funds for final design and construction must be applied to a single Central Valley project. Subsequently, on December 2, 2010 and December 20, 2010, the CHSRA Board identified the Initial Construction Segment (ICS) as comprising portions of the Fresno to Bakersfield and Merced to Fresno sections of the California High-Speed Train (CHST) System as shown in Figure 2 of the attached Backup Information, Maps and Data. Together with Prop. 1A funds that were committed as project match, the CHSRA currently has \$5.5 billion to fund the final design and construction of the ICS. In the Central Valley the Amtrak's *San Joaquins* could offer operational independence by connecting the new infrastructure to the existing BNSF network, on which the *San Joaquin* service presently operates.

To date, the CHSRA and the FRA have concluded a Funding & Cooperative Agreement (Grant Agreement) for the ARRA portion of the funds secured for the ICS but have not yet done so for the remaining FY 2010 funds (\$715 million) that are associated with the ICS, although it is anticipated to be concluded in the second or third quarter of this year.

As the environmental Records of Decision/Notices of Determination (ROD/NOD) and final selection of the alignment have not yet been completed for the two sections that comprise the ICS, and for potential extensions to it (which are the subject of this action item), both the current Grant Agreement and any applicable future Agreements would be conditioned upon the successful completion of the project-level environmental impact studies, the selection of the final preferred alternative route within the selected section and the conclusion of the ROD/NOD for the relevant sections and consistent with all necessary federal, state and other approvals. The CHSRA would retain discretion over the outcome of the environmental process and would have the ability to seek adjustments to the Grant Agreement(s), if necessary, based on its final decisions.

Major factors that need to be considered in the selection process for identifying the project(s) for additional funding include impacts on the project schedule, logical sequencing of the work, and the maximum impact the investment of present Federal and State dollars can have on the project. The CHSRA also must consider the specific requirements and guidance provided in ARRA, in the FY 2010 Consolidated Appropriations Act, and Proposition 1A (as codified in CA Streets and Highways Code §§2704-2704.21 and Public Utilities Code §§185033, 185035 and 185037). The "Independent Utility"/"Operational Independence" requirements associated with the original HSIPR ARRA funding are still applicable.

Throughout the process it should be remembered that the CHST System will be the backbone passenger rail system of the State, and needs to connect southern and northern California, including the metropolitan areas of Los Angeles/Anaheim, with San Francisco, San Jose and thereafter also include

Sacramento and San Diego. This is the first step in the process, to identify, design and construct the first segments of the full system, is only the beginning of a longer-term continuous process, which should logically lead to the initiation of service on an initial operating segment followed by additional extensions of the system and ultimately leading to the completion of the entire interconnected network.

Appendix A: “Options for the Application for Additional HSIPR Funding” summarizes three options for the Board’s consideration and the manner in which the additional funds would be applied. Staff has concluded that there is a “Base Case” Option for which funds should be requested as a minimum request. Staff has developed two additional options which would augment the Base Case Option for the Board’s consideration.

Recommendation:

That the Board delegate to the Chief Executive Officer the authority to submit an application for HSIPR funds and, subsequent to receiving any additional funds, to conclude Funding/Cooperative Agreements with FRA on behalf of the CHSRA. Staff recommends that “Option 1. Base Case Option: Merced and Bakersfield Extensions,” as described in the attached Appendix A and shown in the attached Figure 3, be selected as a minimum HSIPR grant application request. Staff further recommend that the Board approve that the Authority also request additional funds for Option 2A and/or Option 2B as shown in the attached Figure 4.

Attachments:

- Appendix A: OPTIONS FOR THE APPLICATION FOR ADDITIONAL HSIPR FUNDS
- Draft Resolution HSRA #11-17

APPENDIX A

OPTIONS FOR THE APPLICATION FOR ADDITIONAL HSIPR FUNDING

General Comments:

Environmental Process Requirements:

The environmental process is currently being conducted such that, in many instances, more than one alignment alternative is being evaluated and will be available for eventual selection by the Board when the environmental process is concluded. In all instances, typical alignment sections, including alternatives, have been used for costing reasons; however this should not be construed as a preference for one alignment over another. The actual extent of the ICS – and of any of the extensions identified in these grant application options -- and potentially incorporated into additional Grant Agreements with the FRA to provide construction funding, will be conditioned upon completion of environmental studies and selection of a final alignment and the issuance of a ROD/NOD.

Capital Cost Estimates as the Basis for Developing Grant Projects:

For purposes of developing these grant options, the lowest cost estimates for the potential extensions have been used in order to show the maximum potential length of those extensions (as was done with the cost estimates prepared for prior grant applications).

The project scopes are still being evaluated and refined, “value engineering” work is being conducted, there are ongoing consultations with jurisdictions, communities and other stakeholders along the routes, and, as discussed above, the environmental process has not yet been concluded. Once the ROD/NOD’s have been issued, the Board will select the preferred alignment and the CHSRA will then have a more detailed definition of project scope and cost.

As with the ICS, the capital costs for these new grant options encompass final design and construction of track infrastructure only. That is, they do not include core systems costs (communications, signaling, high speed trains, maintenance facilities, electrification, etc.). These project elements will be incorporated as the project is further advanced and closer to the implementation of service.

The Merced-Fresno and Fresno-Bakersfield sections’ 15% designs have undergone a preliminary value engineering review to identify areas where overall reduced life cycle costs can be realized. These are presently being reviewed and verified. The results of these preliminary value engineering exercises have been included as an underlying assumption in the grant options presented below. Similar value engineering exercises will be conducted on the other sections once they achieve the 15% design completion status. It should be noted that value engineering is an ongoing process and will be conducted again at the 30% design completion stage.

Federal/State Match:

Staff has developed the grant options below assuming a 70% Federal contribution and a 30% State match. This is consistent with the guidance suggesting that projects with a significant local match would be considered to be more competitive, while simultaneously conserving Prop. 1A funding for future use as matching funds for future federal applications.

A. Eligibility of Applications:

The FRA has indicated that applicants may submit an application to augment a project that was selected under a previous grant solicitation, such as the ICS. In receiving funding for the ICS in the Central Valley, the CHSRA fulfilled the requirement that any rail project using HSIPR funding be capable of demonstrating, upon completion “Operational Independence” as defined in Sec. 3.5.2 of the Notice of Funding Availability (NOFA). For this latest funding application “Operational Independence” is defined differently to that which applied to earlier funding applications, as follows: “A project is considered to have operational independence if, upon implementation, it will have tangible and measureable benefits, either independently of other investments or cumulatively with projects selected to receive awards under previous HSIPR program solicitations.” For this grant application, staff has identified possible extensions to the ICS which received awards under previous solicitations.

B. Chronology of Events:

The following chronology highlights events leading up to the Board’s selection of a new FRA grant application for additional construction of the California High-Speed Train Project:

- On January 28, 2010, USDOT announced the selection of the four sections eligible to receive up to \$1.656 billion¹, leaving the decision to the CHSRA as to which section would be built first.
- As part of its application for FY 2010 HSIPR funding the CHSRA redefined the four ARRA-eligible sections and submitted them to FRA as part of its applications for additional funding.
- On October 25, 2010, the USDOT announced an additional \$715 million in FY10 SDP funds for use by the CHSRA in the Central Valley. On November 4, 2010, the FRA clarified that both the FY09 ARRA funds and FY10 SDP funds must be applied to a single Central Valley project to be determined by the CHSRA.
- On December 2, 2010, the CHSRA Board adopted a resolution for allocation of the funding for Initial Build in the Central Valley consistent with the staff recommendation.

¹\$2.25 billion minus \$400M earmarked for TJPA’s Transbay Terminal = \$1.85 billion minus \$194M allocated to Phase 1 PE/NEPA/CEQA work = \$1.656 billion of Federal funds.

- On December 9, 2010 the FRA announced an additional \$616 million in ARRA funds for use by the CHSRA in the Central Valley.
- On December 20, 2010, the CHSRA Board approved incorporating the additional \$616 million in ARRA funds into the ICS for the continuation of the project south to Bakersfield (Kern County), as shown in Figure 2 of the attached Backup Information, Maps and Data.

Options for Requesting Additional HSIPR Funding

The options presented below represent potential options for designing and constructing extensions to the currently-funded ICS with a portion of the HSIPR funding that is currently available (\$2.43 billion).

Option 1. Base Case Option: Merced and Bakersfield Extensions

Please refer to Figure 3 of the attached Backup Information, Maps and Data.

The Base Case Option would build on the current \$5.5 billion in funding for the ICS and would result in approximately 180 miles of total completed infrastructure.

The Base Case Option includes two new extensions, one to the north and one to the south.

- To Merced - The north extension would construct civil infrastructure, including trackwork, extending the Initial Construction Segment from just south of Madera, into Merced and would construct an at-grade Merced High Speed Train Station including platforms. This extension would include the Wye at Chowchilla, but no infrastructure or tracks towards San Jose.²
- To Bakersfield - The south extension would construct civil infrastructure, including trackwork, extending the Initial Construction Segment from north of Bakersfield into downtown Bakersfield and would construct an aerial Bakersfield High Speed Rail Station and platforms.

The Base Case Option is estimated to cost \$1.80 billion and assumes:

- \$1.26 billion – Federal funds
- \$0.54 billion – State match

If funded, and combined with the \$5.5 billion already committed, the CHSRA would have a total of \$7.3 billion available for final design and construction.

² Option 2A could be affected by the outcome of pending litigation over the Bay Area to Central Valley High-Speed Train Revised Final Program EIR, *Town of Atherton v. California High-Speed Rail Authority*, Sacramento Superior Court No. 34-2008-80000022 and *Town of Atherton v. California High-Speed Rail Authority*, Sacramento Superior Court No. 34-2010-800000679.

Option 2A. Chowchilla Wye – West Extension

Please refer to Figure 4 of the attached Backup Information, Maps and Data.

Option 2A is designed to build on the Base Case Option as described above. That is, it does not represent an alternative to the Base Case Option, but an extension to it.

Option 2A would add approximately 39 additional miles of civil infrastructure extending westward from the WYE toward San Jose up to the start of the first major tunnel entering the mountains near the San Luis Reservoir.³

Option 2A is estimated to cost \$1.2 billion and assumes:

- \$840 million Federal funds
- \$360 million State match

If Option 2A is combined with the Base Case Option, the grant request would total:

- \$2.10 billion - Federal funds
- \$0.90 billion - State match

Although the CHSRA could theoretically seek more Federal funds for Option 2A (and prepare a grant application request for the full \$2.4 billion in available funding), this is not possible from a practical standpoint because just beyond this 39 mile extension, there is a tunnel section that would require more funding than is available to complete it.

If funding were secured for Option 2A and combined with the Base Case Option and the \$5.5 billion currently available, the CHSRA would have approximately \$8.5 billion in funds available for final design and construction.

Option 2B. Bakersfield Station – South Extension

Please refer to Figure 4 of the attached Backup Information, Maps and Data.

Option 2B is designed to build on the Base Case Option 1 above. That is, it does not represent an alternative to the Base Case Option, but an extension to it.

³ Option 2A could be affected by the outcome of pending litigation over the Bay Area to Central Valley High-Speed Train Revised Final Program EIR, *Town of Atherton v. California High-Speed Rail Authority*, Sacramento Superior Court No. 34-2008-80000022 and *Town of Atherton v. California High-Speed Rail Authority*, Sacramento Superior Court No. 34-2010-800000679.

Option 2B would add approximately 15 miles of additional civil infrastructure and trackwork to the south of Bakersfield Station (towards Palmdale). Extension 2B would provide approximately 9 miles of at-grade infrastructure and 6 miles of viaduct south of Bakersfield and includes the major viaduct that rises from the Central Valley and enters into the Tehachapi Mountains.

Option 2B is estimated to cost \$1.67billion and assumes:

- \$1.17 billion – Federal funds
- \$0.50 billion – State match

Combining Option 2B with the Base Case Option the total grant request would be:

- \$2.43 – Federal funds
- \$1.04 – State match

If funding were secured for Option 2B and combined with the Base Case Option plus the \$5.5 billion currently available, the CHSRA would have approximately \$8.98 billion in funds available for final design and construction.

Factors to consider:

- It is important to note that, if the FRA were to fully fund the Base Case Option and only partially fund Option 2A or 2B, both 2A and 2B are “scalable” in that the amount of construction could be scaled back depending on the amount of the funds which are available.
- It is also important to note that FRA will determine which funding source to provide to projects selected for award, specifically whether it is ARRA or FY 10 funds. As previously noted, any project that receives ARRA funding must be able to be completed by September 30, 2017; however FY 10 funds are not subject to this restriction. The environmental clearance schedule for Option 2A is further advanced than the Option 2B schedule. Due to the ARRA funding limitations, it is apparent that Option 2B would be limited to FY 2010 funds. The FRA allows applicants to identify specific aspects of their projects that might favor one or the other (FY 10 or ARRA) but it will determine which funding to provide to projects selected for award at its own discretion.

Figure 1: Central Valley Alignment

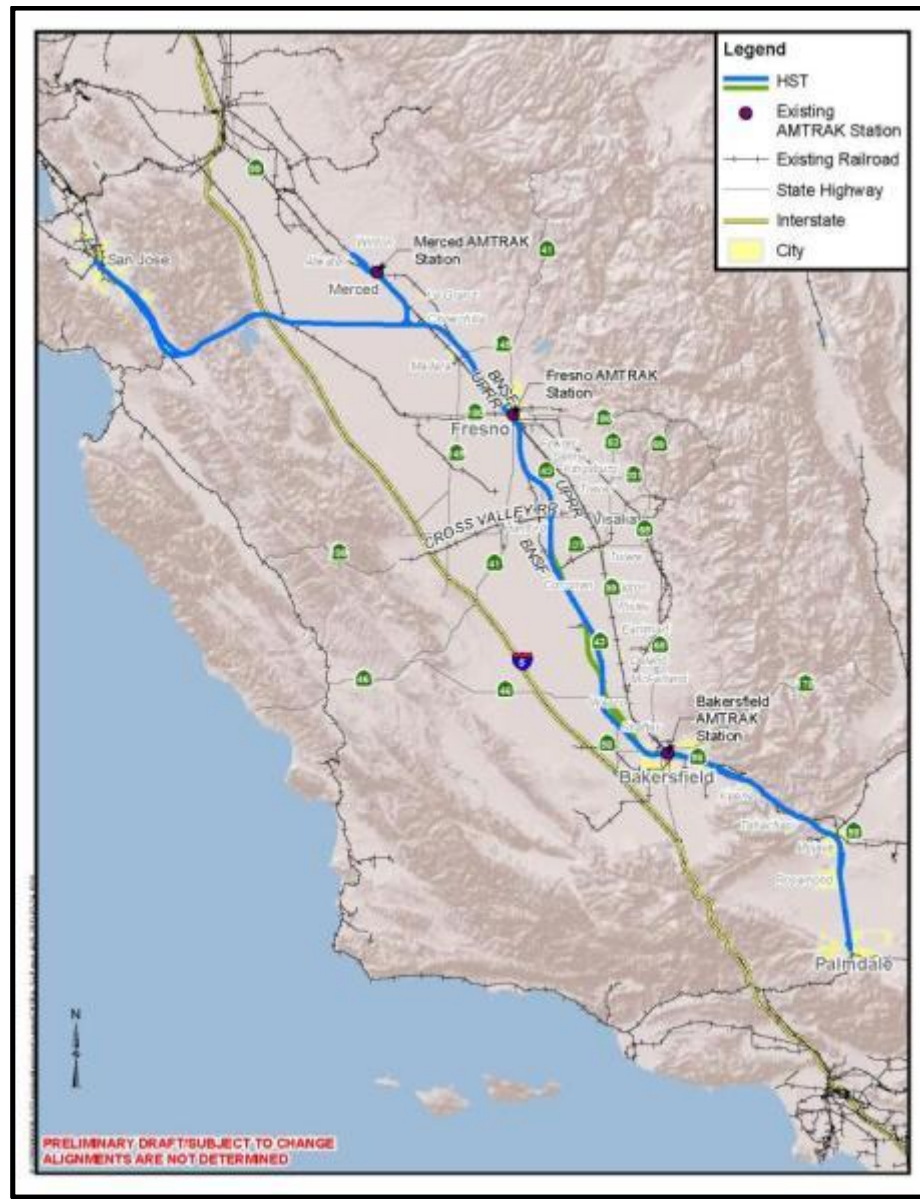


Figure 2: Initial Construction Section

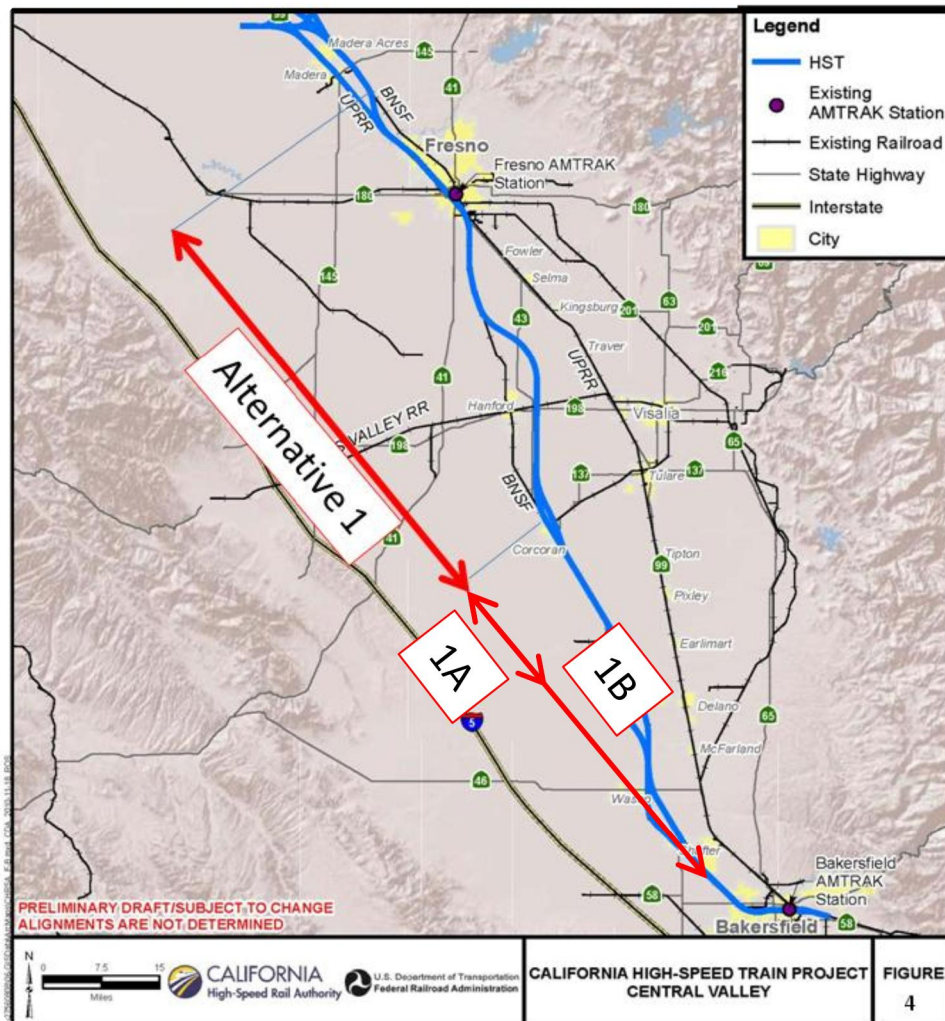


Figure 3: Option 1 Base Case

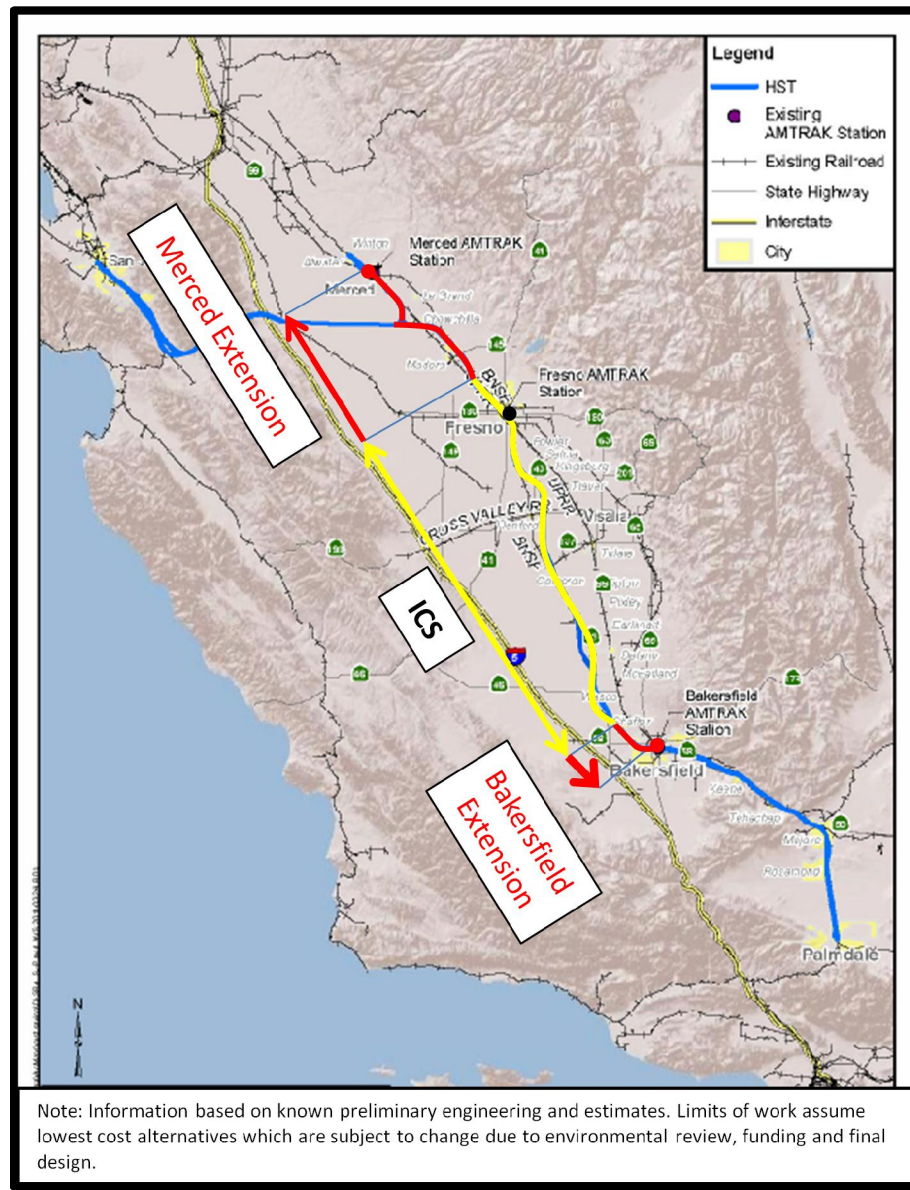


Figure 4: Options 2A & B – Additional Extensions

